Celui-ci doit être recommandé sans la moindre hésitation — N° 2]

WILLIAM R. SANDERS, B.L., M.D., L.R.C.S.E.,

VICE-PRESIDENT OF THE MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH; FELLOW, MEMBER OF COUNCIL, AND EXAMINER, ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH; EXAMINER IN MEDICINE, UNIVERSITY OF ST ANDREWS; FORMERLY PRESIDENT OF THE ROYAL MEDICAL SOCIETY OF EDINBURGH, AND OF THE PARISIAN MEDICAL SOCIETY; CONSERVATOR OF THE MUSEUM OF THE ROYAL COLLEGE OF SURGEONS OF EDINBURGH; SENIOR ORDINARY PHYSICIAN TO THE ROYAL INFIRMARY; LECTURER ON THE INSTITUTES OF MEDICINE AND CLINICAL MEDICINE, ETC.

LECTURES.

1854 and 1855.

Demonstrations of the Pathological Preparations in the Museum of the Royal College of Surgeons of Edinburgh. (Course of Thirteen Demonstrations on Saturdays, open to Students of Medicine—attended by 32–34 Students.)

1855–6 to 1868–9.

Six Months' Course of Lectures on Physiology, or the Institutes of Medicine, including Histology (and Outlines of Pathology).

1869.

Practical Class of Histology in Summer.

1861–1869.

Lectures and Instruction in Clinical Medicine at the Royal Infirmary of Edinburgh.

Introductory Address, delivered at the Medical and Surgical School, on the opening of the Session 1860–61. Published in *Edinburgh Medical Journal, October* 1861, p. 351.

Lectures delivered at the Conversaziones of the Royal College of Surgeons of Edinburgh:—

1. On the Cell Theory. *January* 1856.

2. On the Electricity of Nerves. *June* 1858.

3. On Reproduction in the Animal Kingdom. *January* 1861.

Lecture delivered at Surgeons' Hall, before the British Medical Association, during their Meeting in Edinburgh, *August* 1858, entitled "Observations on some of the Objects of Interest contained in the Museum of the Royal College of Surgeons of Edinburgh" (chiefly on the Pathological Specimens). Report of this Lecture published in the *British Medical Journal*, 1858, p. 675 (not corrected by myself).

In this lecture, the following passage, advocating the study of morbid anatomy, occurs:—

"I have only to say a word or two in regard to pathology generally, in conclusion. Pathological anatomy is absolutely essential for the certainty of diagnosis and the knowledge of the mechanism of disease. I shall not illustrate this remark by anything more than by putting it in a simple point of view. No one would think of studying physiology or hygiene without a knowledge of healthy anatomy; and, by a parity of circumstances, it would be quite absurd to seek to understand pathology, or the nature of disease, without a knowledge of morbid anatomy. In most of our schools, pathology is comparatively neglected; and the consequence of this is, that the scientific basis of medicine is not so extensively nor so well cultivated as it ought to be. I would even say, further, that not only is morbid anatomy necessary for pathology, but even for therapeutics—the most backward branch of medicine.

"It is said against the study of pathological anatomy, that it tends to diminish our confidence in Nature. I shall not dwell long on this point, because I think it would be granted at once that pathological anatomy, when properly pursued, could not diminish but rather increase our confidence in the operations of Nature. For example, there is the case of necrosis. In place of a bone which has been dead, Nature has formed a new bone, covering the old one, but in her efforts at cure she is unfortunately enclosing the disease. The surgeon by opening the bone extracts the disease, and Nature concludes her cure. Pathology opens up a wide field for our efforts to cure. It should teach us both the destruction that disease makes, that we may prepare ourselves to counteract it, and the curative powers of Nature, that we may assist them, art enabling Nature to accomplish what, unaided, she fails by inadequate means or is hindered by removable circumstances, from bringing to a fortunate issue."

LIST OF PUBLISHED WORKS AND COMMUNICATIONS TO MEDICAL SOCIETIES.

A MONOGRAPH ON THE STRUCTURE OF THE SPLEEN, 56 pp., with Plate,

In *Annals of Anatomy and Physiology*, edited by Professor Goodsir. 1850. Also published separately.

For this a gold medal was awarded at the Medical Graduation at the University of Edinburgh in 1849.

Referred to by Bérard (*Cours de Physiologie*), Longet, Kölliker, Funke, Gray on the Spleen, Bennett on Leucocythæmia, Quain and Sharpey, Todd and Bowman, Carpenter, Kirkes, and in other standard works on Anatomy and Physiology.

MONOGRAPH ON PARALYSIS AGITANS, pp. 19;

MONOGRAPH ON METALLIC TREMOR, pp. 9;

In Russell Reynold's *System of Medicine*, vol. ii.

1849.

On the Physiological Anatomy of the Spleen. (Preliminary Notice in *Medical Times*, *April* 1849, p. 490.)

1851.

Microscopic Illustrations in Professor Christison's Lecture on Bright's Disease of the Kidneys.—*Edinburgh Monthly Medical Journal*, *June* 1851, xii. pp. 562–7. Reproduced in Dr Bennett's Work on Clinical Medicine, 5th Edition, p. 822.

Abstract of Claude Bernard's Observations on the Production of Sugar in the Liver of Man and Animals, in *Edinburgh Monthly Medical Journal*, *September* 1851, p. 290.

Demonstration that Crystallisation of Blood occurs in the Systemic as well as the Splenic Blood of Mammals.—Mentioned by Henlé in *Canstatt's Jahresbericht* for 1851, I. 37.

1852.

On Helmholz's Speculum for examining the Retina in the Living Eye.—*Edinburgh Monthly Medical Journal*, *July* 1852, xv. 40 (first Introduction of Ophthalmoscope into Britain).

On the Connexion of the Minute Arteries with the Malpighian Bodies of the Spleen (Meeting of Physiological Society of Edinburgh, January 31, 1851).—*Edinburgh Monthly Medical Journal*, 1852, xiv. 286. [Demonstration that the Minute Arteries pass through the Malpighian Body; referred to and confirmed by Huxley in the *Quarterly Journal of Microscopical Science, January* 1854, ii. 76, and in *Kolliker's Histology*, translated for *Sydenham Society*, ii. 425.]

On the Development of Pus Corpuscles in the Vesicles of Smallpox (Physiological Society, February).—*Edinburgh Monthly Medical Journal, May* 1852, p. 479.

On the Contents of the Cyst in a Case of Ranula, *l. c.*

On Morbid Alterations in the Malpighian Bodies of the Human Spleen (Physiological Society, November 1852). —*Edinburgh Medical Journal, January* 1853, p. 84. (Transparent or Waxy Degeneration; and Extravasation of Blood in connexion with it.)

1853.

Biliary Calculus, and Soft Concretion from the Cystic Duct (Physiological Society, February 1853).—*Edinburgh Medical Journal, May* 1853, p. 469.

On the Trichina Spiralis (Physiological Society, March 1853).—*Edinburgh Medical Journal, May* 1853, p. 473.

On Waxy Degeneration (Physiological Society, 17th December 1853). — *Edinburgh Medical Journal, February* 1854, pp. 187, 188. (Translated into German by Virchow in *Leistungen in der Pathologischen Anatomie, Canstatt's Jahresbericht*, 1854, ii. 21; reviewed by Professor Parkes in *British and Foreign Medico-Chirurgical Review, October* 1854, p. 417–419.

This communication contains the description of waxy spleen, and general statements on the nature of waxy degeneration (subsequently called "amyloid degeneration" by Virchow). Among other references, it is thus spoken of by Dr Aitken, Professor of Pathology in the Army Medical School, in his work on the Science and Practice of Medicine, 5th edition, 1868, i. p. 120:—

"But Drs Gairdner and Sanders of Edinburgh had anticipated many of the

views and descriptions of the Berlin professor; and, qnite independently of Virchow, they initiated in this country the first steps in the elucidation of this very remarkable degeneration. They showed that the waxy condition of the liver and kidney was due to the same change as that which was seen to take place in the spleen. These valuable communications were made to the Physiological Society of Edinburgh, and an account of them may be read in the *Edinburgh Monthly Journal of Medical Science* for February 1854, p. 186, and also in May of the same year."

Also, at p. 130:—"In this remarkable degeneration, an acqnaintance with a new fact in Pathology must be recognised,—*i.e.*, since 1854,—associating itself with grave constitutional disease, and distinguished from every other morbid condition hitherto known by the physical, chemical, and physiological characters just described." See also the description of waxy (amyloid or lardaceous) kidney p. 118:—"Gairdner, Sanders, and Virchow, were the first to discover the true nature of this degeneration of the kidney." And spleen, ii. pp. 947-8. See also *Murchison's Translation* of Frerichs on Diseases of the Liver, ii. 168, footnote.

Reaction of Cellulose or Waxy Spleen (Physiological Society, February 1854).—*Edinburgh Medical Journal, April* 1854, p. 381.

Waxy Spleen; the Trabeculæ affected: Cellulose Reaction. (Physiological Society, April 1854).—*Edinburgh Medical Journal, November* 1854, p. 468. (Referred to as an original observation by Virchow in his *Archiv*, viii. p. 143.)

Mit Recht hebt Sanders hervor dass auch die Trabekeln verändert werden; ich sah sie verdickt und nach der einwirkung der Reagentien durch und durch blau werden, etc.

1860.

Tubal Pregnancy (Communication to Medico-Chirurgical Society).—*Edinburgh Medical Journal, July* 1860, p. 76.

Open Ductus Arteriosus—Case and Dissection.—*Loc. cit.*, p. 77.

1864.

Cancer of the Bladder: Fragments forming Urethral Plugs discharged in the Urine: Case and Dissection (Medico-Chirurgical Society).—*Edinburgh Medical Journal, September* 1864, p. 273.

Coal-Miners' Phthisis: Minute Fragments of Coal expectorated, as shown by Microscopic Examination (Medico-Chirurgical Society).—*Edinburgh Medical Journal, September*

1864, p. 274. (Referred to in Dr Warburton Begbie's Paper on Anthracosis or Coal-Miner's Phthisis, p. 19.—*Glasgow Medical Journal, September* 1866, p. 178.)

1865.

Cancer of the Brain—Case and Dissection (Medico-Chirurgical Society).—*Edinburgh Medical Journal, April* 1865, p. 956.

Case of an Unusual Form of Nervous Disease,—Dystaxia or Pseudo-Paralysis Agitans (read before the Medico-Chirurgical Society of Edinburgh, April 1865).—*Edinburgh Medical Journal, May* 1865, p. 987.

On Paralysis of the Palate in Facial Palsy.—*Edinburgh Medical Journal, August* 1865, p. 140; *reprinted in Dublin Medical Press, September* 1865, pp. 247 and 269. (Referred to by Dr Bazire in his Translation of *Trousseau's Clinical Medicine* for the New Sydenham Society, vol. i. p. 319, Note.)

Vertical Hemiplegia of the Palate in a Case of Diabetes Mellitus.—*Edinburgh Medical Journal, September* 1865, p. 244.

On Facial Hemiplegia and Paralysis of the Facial Nerve.—*Lancet*, 21*st* and 28*th October* 1865, pp. 452 and 478. (Referred to by Professor Aitken, *op. cit.*, ii. p. 463.)

"Pathology.—In previous editions of this text-book, erroneous doctrines were stated regarding facial paralysis in accepting and perpetuating the views of Dr Todd, that '*the fifth nerve is more or less involved in the paralysing lesion*,' and in mixing up the phenomena of facial paralysis depending on central or cerebral lesion with facial paralysis due simply to lesion of the trunk or branches of the portio dura. I am indebted to my friend Dr Sanders of Edinburgh for kindly directing my attention to this error, and for references to his important papers in the *Lancet* of October 1865. From his papers on this subject, and the clinical lectures of the late Professor Trousseau on facial paralysis, the following account is given of this affection:" etc., etc.

1866.

Purulent Phlebitis (Medico-Chirurgical Society).—*Edinburgh Medical Journal, February* 1866, p. 761. Cited by Braidwood on Pyæmia, Astley Cooper Prize Essay, 1868, p. 285.

Dilatation of the Bronchi (Medico-Chirurgical Society).—*Edinburgh Medical Journal, February* 1866, p. 762.

On Aphasia: Case illustrating the supposed Connexion of Aphasia (loss of the Cerebral Faculty of Speech) with Right Hemiplegia and Lesion of the Third Left Frontal Convolution of the Brain.—*Edinburgh Medical Journal, March* 1866, p. 811.

This and my other papers on Aphasia are referred to by Hughlings Jackson, Bateman, Ogle, and other writers. Dr Œdmansson of Sweden (*Some Cases of Aphasia, Dublin Quarterly Medical Journal, November* 1868, p. 488) says:—

"In England the subject has latterly been followed up with interest. Hughlings Jackson (*London Hospital Reports*, 1864) gives an account of forty cases, in all of which, with one exception, the hemiplegia was dextral. The first case with post mortem examination, and confirming Broca's views, was brought forward by Sanders (*Edinburgh Medical Journal*, 1866. *February*). In a recent case by the same author, the greatest change was found in the insula Reilii, which led him to express the opinion, that possibly the *insula Reilii* rather than the *gyrus frontalis tertius* is the point on whose integrity the power of speech depends. Sanders assumes, with Bouillaud, two forms of aphasia—amnemonic and ataxic; but believes, nevertheless, that in aphasia a certain degree of defect of memory is always met with." Etc., etc.

Case of Aphasia—patient living (Medico-Chirurgical Society).—*Edinburgh Medical Journal, March* 1866, p. 856.

Aphasia, with Right Hemiplegia; Lesion in the Island of Reil, extending into the External Frontal Convolution, in *Lancet, June* 1866, p. 656. (In this paper, the Island of Reil was suggested as probably the seat of lesion in localized Aphasia.)

Description of Enormous Fibroid Tumour of the Uterus, excised by Dr James Gillespie.—*Edinburgh Medical Journal, July* 1866, p. 34.

Case of Pyle-Phlebitis, or Inflammation of the Portal Vein—with Dissection (Medico-Chirurgical Society).—*Edinburgh Medical Journal, July* 1866, p. 68.

Case of Aphasia and Right Hemiplegia, with Dissection (with similar Case by Dr Warburton Begbie).—*Edinburgh Medical Journal, August* 1866, p. 124.

Case of Addison's Disease (Medico-Chirurgical Society.)—*Edinburgh Medical Journal, April* 1866, p. 953.

1868.

Case of Poisoning with the Rhus Toxicodendron (read before the Medico-Chirurgical Society, Edinburgh, January 1868). —*Edinburgh Medical Journal, February* 1868, p. 714.

Case of Albuminuria with Dropsy; Atrophic Bright's Disease of Kidney with Waxy (Amyloid) Malpighian Bodies. Paracentesis Abdominis fourteen times repeated: Temporary Disappearance of all the Urgent Symptoms. Death from Pulmonary Œdema and Uræmia. Autopsy. Under Dr Sanders of Edinburgh, and afterwards Professor Gairdner of Glasgow.—*Glasgow Medical Journal, February* 1868, p. 387.

On the Variation and Vanishing of Cardiac Organic Valvular Murmurs (read before the Medico-Chirurgical Society, Edinburgh, April 1868).—*Edinburgh Medical Journal, January* 1869, p. 584.

1869.

Case of Heart Disease: Partial Fibroid Degeneration, the result of Myo-carditis, (read before the Medico-Chirurgical Society, Edinburgh, *December* 1868).—*Edinburgh Medical Journal, February* 1869, p. 673.

Large Cysto-cancerous Tumour of the Omentum: Case and Dissection (Medico-Chirurgical Society).—*Edinburgh Medical Journal, June* 1869, p. 1132.

Mercurio-Syphilitic Deposits in the Brain, and Deformity of the Liver (Medico-Chirurgical Society, Edinburgh).—*Edinburgh Medical Journal, June* 1869, p. 1133.